IN THE CLAIMS:

The current claims follow. For claims not marked as amended in this response, any difference in the claims below and the previous state of the claims is unintentional and in the nature of a typographical error.

1. (Cancelled)

2. (Currently Amended) The method of claim ~~1~~ 9, wherein the graphic model has ~~the internal body topology is~~ a 3D volume meshing, tetrahedron-type internal body topology.

3. (Currently Amended) The method of claim ~~1~~ 9, wherein the graphic model has ~~the internal body topology is~~ a 3D grid mapping internal body topology.

4-6. (Cancelled)

7. (Currently Amended) The method of claim ~~1~~ 9, further comprising adding sampling points to the surface mesh.

8. (Currently Amended) The method of claim 3, wherein the graphic model has an internal body topology ~~is~~ represented as cubes, and the internal body topology is maintained by a

tree structure to perform efficient searching.

9. (Previously Presented) A method for determining the thickness of a wall of a graphic model, comprising:

identifying a first element in a surface mesh of a model;

projecting the first element onto a face of the model to identify a first projected point;

determining a face normal direction at the projected point;

searching for a second element in the surface mesh of the model, guided by the face normal direction;

identifying the second element in the surface mesh of the model;

projecting the second element onto a face of the model to identify a second projected point; and

determining and storing the distance between the first element and the second element.

10. (Original) The method of claim 9, wherein the searching is performed from the first element and in the face normal direction.

11. (Cancelled)

12. (Currently Amended) The data processing system of claim ~~11~~ 19, wherein the graphic model has ~~the internal body topology is~~ a 3D volume meshing, tetrahedron-type internal body topology.

13. (Currently Amended) The data processing system of claim ~~11~~ 19, wherein the graphic model has ~~the internal body topology is~~ a 3D grid mapping internal body topology.

14-16. (Cancelled)

17. (Currently Amended) The data processing system of claim ~~11~~ 19, wherein the data processing system ~~is also configured to perform the step of adding~~ further comprises means for sampling points to the surface mesh.

18. (Currently Amended) The data processing system of claim ~~11~~ 19, , wherein the graphic model has an internal body topology ~~is~~ represented as cubes, and the internal body topology is maintained by a tree structure to perform efficient searching.

19. (Previously Presented) A data processing system having at least a processor and accessible memory, comprising:

means for identifying a first element in a surface mesh of a model;

means for projecting the first element onto a face of the model to identify a first projected point;

means for determining a face normal direction at the projected point;

means for searching for a second element in the surface mesh of the model, guided by the face normal direction;

means for identifying the second element in the surface mesh of the model;

means for projecting the second element onto a face of the model to identify a second projected point; and

means for determining and storing the distance between the first element and the second element.

20. (Original) The data processing system of claim 19, wherein the searching is performed from the first element and in the face normal direction.

21. (Cancelled)

22. (Currently Amended) The computer program product of claim ~~21~~ 29, wherein the graphic model has ~~the internal body topology is~~ a 3D volume meshing, tetrahedron-type internal body topology.

23. (Currently Amended) The computer program product of claim ~~21~~ 29, wherein the graphic model has ~~the internal body topology is~~ a 3D grid mapping internal body topology.

24-26. (Cancelled)

27. (Currently Amended) The computer program product of claim ~~21~~ 29, further comprising instructions for adding sampling points to the surface mesh.

28. (Currently Amended) The computer program product of claim ~~21~~ 29, wherein the graphic model has an internal body topology ~~is~~ represented as cubes, and the internal body topology is maintained by a tree structure to perform efficient searching.

29. (Previously Presented) A computer program product having instructions stored in a machine usable medium, comprising:

instructions for identifying a first element in a surface mesh of a model;

instructions for projecting the first element onto a face of the model to identify a first projected point;

instructions for determining a face normal direction at the projected point;

instructions for searching for a second element in the surface mesh of the model, guided by the face normal direction;

instructions for identifying the second element in the surface mesh of the model;

instructions for projecting the second element onto a face of the model to identify a second projected point; and

instructions for determining and storing the distance between the first element and the second element.

30. (Original) The computer program product of claim 29, wherein the searching is performed from the first element and in the face normal direction.